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EXAMINER	
BUTLER, PATRICK NEAL	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/662,492	ORTEGA, ALBERT E.	
	Examiner	Art Unit	
	Patrick Butler	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32 and 34* is/are pending in the application.

4a) Of the above claim(s) *6-9,21-23 and 27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,10-20,24-26,28-32 and 34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5, 10-20, 24-26, 28-32, and 34 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation of "about 180 °C" line Claim 1, line 7; Claim 17, line 9; and Claim 34, line 2 is not supported by the Specification as originally filed. Although the specification provides for a range with a lower limit of 180 °C (see Specification, page 8, line 2), the claimed range's lower boundary exceeds this range for temperatures that are less than 180 °C but within the range of about 180 °C. Claims 2-5, 10-16, 18-20, 24-26, and 28-32 are rejected via their dependency.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 14, 15, 17-20, 26, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Gillespie (U.S. Patent No. 5,783,503) as evidenced by Tortora (*Understanding Textiles*, pages 38, 39, 330, and 401).

With respect to Claim 1, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret (extruding), attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection surface to form a web (see Fig. 4; col. 3, lines 16-34 and col. 9, lines 18-26). Gillespie teaches using combinations including nylon and polyester (see Gillespie, col. 4, lines 66 - col. 5, line 25). Increases in moisture absorbency increase fiber conductivity, which is antistatic since it limits static buildup, and nylon's or polyester's presence would improve the absorbency of the blend since they have 0.4-4.5% standard moisture regain (see Tortora, *Understanding Textiles*, pages 38 and 39, Table 2.1, and page 401, second paragraph). Thus, nylon's or polyester's additional presence acts as antistatic agents to the polyester or olefins in the blends. The claim limitation of "wherein the filaments can be bonded" is noted as not positively reciting a step of thermal bonding. Instead, the limitation is a property of the process's product that would necessarily be met by Gillespie principally because Gillespie teaches the claimed steps of making the product. Moreover, Gillespie teaches that a blend of nylon and polyolefins is able to be extruded at about 250 °C (see col. 8, lines 45-53), which is within the claimed property range of being able to be bonded between about 180 and about °C. However, if the claim limitation of "wherein the filaments can be bonded" is held to be a positively recited step of bonding at the

claimed temperatures, then Gillespie further teaches the step as applied to Claim 34 below.

With respect to Claims 2 and 4, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 3, Gillespie teaches using “nylon … and copolymers thereof” (see col. 5, lines 5-8), which reads on the claim language “nylon copolymers,” which meets the limitations of the claim.

With respect to Claim 5, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claims 14 and 15, nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side configuration (see Fig. 3; see col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5% of the surface area. Moreover, if both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

With respect to Claim 17, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret using blends in separate extruders to form filament with one of the blends forming a portion of the surface of the filaments, attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection

surface to form a web (see Fig. 3 and 4; col. 3, lines 16-34; col. 5, line 66 through col. 6, line 9; col. 8, lines 8-19; and col. 9, lines 18-26).

With respect to Claim 18, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 19, Gillespie teaches using "nylon ... and copolymers thereof" (see col. 5, lines 5-8), which reads on the claim language "nylon copolymers," which meets the limitations of the claim.

With respect to Claim 20, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claim 26, Gillespie teaches that at least about 5 percent of the surface area of each filament is made of a nylon polymer (see Fig. 3; see col. 5, line 66 through col. 6, line 4). Nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side configuration (see Fig. 3; see col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5% of the surface area. Moreover, if both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

With respect to Claim 34, Gillespie teaches forming spunbonded webs (see col. 7, lines 16-25) but does not clarify that spunbonded webs are bonded while molten. It is noted that Gillespie does teach that the polymers are molten at about 250 °C (see col.

8, lines 45-53), which is within the claimed property range of being able to be bonded between about 180 and about °C. However, spunbonding is necessarily done by bonding the filaments while they are still molten (see Tortora, *Understanding Textiles*, page 330, first paragraph).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 14, 15, 17-20, 26, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillespie (U.S. Patent No. 5,783,503) in view of Tortora (Understanding Textiles, pages 153-157, 330, 401, and 402).

With respect to Claim 1, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret (extruding), attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection surface to form a web (see Fig. 4; col. 3, lines 16-34 and col. 9, lines 18-26).

If Gillespie's nylon and polyester do not meet the claimed limitation of "antistatic agent" (see col. 4, lines 66 - col. 5, line 25), then Gillespie does teach to incorporate into the polymer melt components to control electrical properties (forming in an extruder) (see col. 5, lines 35-42).

Tortora teaches that bicomponent fibers contain metal or carbon, which are antistatic agents (see page 401, forth paragraph, through page 402, line 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tortora's antistatic metal or carbon in the composition of fibers taught by Gillespie in order to produce fibers that decrease static buildup (see Tortora, page 401, paragraphs 2-4) and in order to control electrical properties (see Gillespie col. 5, lines 35-42).

The claim limitation of "wherein the filaments can be bonded" is noted as not positively reciting a step of thermal bonding. Instead, the limitation is a property of the process's product that would necessarily be met by Gillespie, solely or in view of Tortora, principally because Gillespie, solely or in view of Tortora, teaches the claimed steps of making the product. Moreover, Gillespie teaches that a blend of nylon and polyolefins is able to be extruded at about 250 °C (see col. 8, lines 45-53), which is within the claimed property range of being able to be bonded between about 180 and about °C. However, if the claim limitation of "wherein the filaments can be bonded" is held to be a positively recited step of bonding at the claimed temperatures, then Gillespie further teaches the step as applied to Claim 34 below.

With respect to Claims 2 and 4, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 3, Gillespie teaches using "nylon … and copolymers thereof" (see col. 5, lines 5-8), which reads on the claim language "nylon copolymers," which meets the limitations of the claim.

Moreover, with respect to Claim 3, Tortora teaches that nylon 6 has a higher tenacity than nylon 6,6 (see page 156, *Strength* section). It would have been obvious to one of ordinary skill in the art at the time the invention was made to select nylon 6 as the nylon to use in Gillespie in order to have greater tenacity.

With respect to Claim 5, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claims 14 and 15, nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side configuration (see Fig. 3; see col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5% of the surface area. Moreover, if both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

With respect to Claim 17, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret using blends in separate extruders to form filament with one of the blends forming a portion of the surface of the filaments, attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection

surface to form a web (see Fig. 3 and 4; col. 3, lines 16-34; col. 5, line 66 through col. 6, line 9; col. 8, lines 8-19; and col. 9, lines 18-26).

With respect to Claim 18, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 19, Gillespie teaches using "nylon ... and copolymers thereof" (see col. 5, lines 5-8, which reads on the claim language "nylon copolymers," which meets the limitations of the claim.

Moreover, with respect to Claim 19, Tortora teaches that nylon 6 has a higher tenacity than nylon 6,6 (see page 156, *Strength* section). It would have been obvious to one of ordinary skill in the art at the time the invention was made to select nylon 6 as the nylon to use in Gillespie in order to have greater tenacity.

With respect to Claim 20, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claim 26, Gillespie teaches that at least about 5 percent of the surface area of each filament is made of a nylon polymer (see Fig. 3; see col. 5, line 66 through col. 6, line 4). Nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side configuration (see Fig. 3; see col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5% of the surface area. Moreover, if both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon

would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

With respect to Claim 34, Gillespie teaches forming spunbonded webs (see col. 7, lines 16-25) but does not clarify that spunbonded webs are bonded while molten. It is noted that Gillespie does teach that the polymers are molten at about 250 °C (see col. 8, lines 45-53), which is within the claimed property range of being able to be bonded between about 180 and about °C. However, spunbonding is necessarily done by bonding the filaments while they are still molten (see Tortora, *Understanding Textiles*, page 330, first paragraph). However, if Gillespie's teaching of spunbonding is not held to constitute a teaching of bonding at a temperature of between about 180 and about 250 °C, then it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Tortora's teaching of spunbonding by bonding molten filaments together in Gillespie's spunbonding process in order to further bond the fabric.

Claims 1-5, 10-20, 24-26, and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillespie (U.S. Patent No. 5,783,503) in view of either Warburton (US Patent No. 4,081,383) or George (US Patent No. 4,167,464).

With respect to Claim 1, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret (extruding), attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection surface to form a web (see Fig. 4; col. 3, lines 16-34 and col. 9, lines 18-26).

If Gillespie's nylon (polycaprolactum) and polyester do not meet the claimed limitation of "antistatic agent" (see col. 4, lines 66 - col. 5, line 25), then Gillespie does teach to incorporate into the polymer melt components to control electrical properties (forming in an extruder) (see col. 5, lines 35-42).

Warburton teaches using a copolymer that contains sodium salts (sodium salts) of dodecane-1-sulfonic acid (a C_{10}-C_{18} alkane and sulfonic acid) (see col. 4, line 60 through col. 5, line 6) and vinyl sulfonic acid (see col. 3, line 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Warburton's copolymer composition in the extrusion of Gillespie in order to provide the product with better anti-soiling treatment, and to control the anti-soiling treatment's polymer particle size (see Abstract and col. 4, lines 60 and 61).

Alternative to Warburton, George teaches using a copolymer that contains sodium salts (sodium salts) of dodecane-1-sulfonic acid (a C_{10}-C_{18} alkane and sulfonic acid) or octadecane-1-sulfonic acid (a C_{10}-C_{18} alkane and sulfonic acid) (see col. 4, line 65 through col. 5, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use George's copolymer composition in the extrusion of Gillespie in order to provide the product with better degree of absorption of water and body fluids (see Abstract; col. 1, lines 46-49; and col. 6, lines 42-59).

Since Applicant's claim language (see Claim 16) shows that a blend containing polycaprolactum, sulfonic acid, a C_{10}-C_{18} alkane, and sodium salts is an antistatic agent,

Warburton's and George's teaching of the agent (as cited above) necessarily meets the claimed limitation of "antistatic agent." Moreover, Warburton recognizes the benefit of the polymer in reducing static build-up (see col. 6, lines 34-37).

The claim limitation of "wherein the filaments can be bonded" is noted as not positively reciting a step of thermal bonding. Instead, the limitation is a property of the process's product that would necessarily be met by Gillespie, solely or in view of Warburton or George, principally because Gillespie teaches the claimed steps of making the product. Moreover, Gillespie, solely or in view of Warburton or George, teaches that a blend of nylon and polyolefins is able to be extruded at about 250 °C (see col. 8, lines 45-53), which is within the claimed property range of being able to be bonded between about 180 and about °C. However, if the claim limitation of "wherein the filaments can be bonded" is held to be a positively recited step of bonding at the claimed temperatures, then Gillespie further teaches the step as applied to Claim 34 below.

With respect to Claims 2 and 4, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 3, Gillespie teaches using "nylon ... and copolymers thereof" (see col. 5, lines 5-8), which reads on the claim language "nylon copolymers," which meets the limitations of the claim.

With respect to Claim 5, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claims 10, 11, 16, and 28, Claim 16's and Claim 28's antistatic agent of polycaprolactum, sulfonic acid, a C_{10}-C_{18} alkane, and sodium salts is taught by Gillespie in view of Warburton or George as cited above with respect to Claim 1. Such antistatic agent was indicated to read on Claims 10 and 11 (see Office Action mailed 22 March 2006, page 3, third paragraph and Applicant's Arguments received 22 December 2006, page numbered 9 by Applicant, first paragraph).

With respect to Claims 12, 13, 24, 25, 29, and 32, applicant's specification teaches that a composition of a polycaprolactum, sulfonic acid, a C_{10}-C_{18} alkane, and sodium salts added to a two polymer delivery results in 0.6 Kilovolts/inch when added at 1% concentration (see Specification, page 10, table 1).

As Warburton's composition teaches adding the sodium salts (sodium salts) of dodecane-1-sulfonic acid (a C_{10}-C_{18} alkane and sulfonic acid) is present from 0.5-8% (see col. 5, lines 47-49), the 1% concentration is taught. As George's composition teaches adding the sodium salts (sodium salts) of dodecane-1-sulfonic acid (a C_{10}-C_{18} alkane and sulfonic acid) is present from 0.01-5% (see col. 5, lines 47-49), the 1% concentration is taught. Therefore, Warburton's or George's static would measure at less than one kilovolt principally because it teaches the same process and composition as applicant, which arrived at said static level.

With respect to Claims 14 and 15, nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side configuration (see Fig. 3; see col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5%

of the surface area. Moreover, if both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

With respect to Claim 17, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret using blends in separate extruders to form filament with one of the blends forming a portion of the surface of the filaments, attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection surface to form a web (see Fig. 3 and 4; col. 3, lines 16-34; col. 5, line 66 through col. 6, line 9; col. 8, lines 8-19; and col. 9, lines 18-26).

With respect to Claim 18, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 19, Gillespie teaches using "nylon ... and copolymers thereof" (see col. 5, lines 5-8, which reads on the claim language "nylon copolymers," which meets the limitations of the claim.

With respect to Claim 20, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claim 26, Gillespie teaches that at least about 5 percent of the surface area of each filament is made of a nylon polymer (see Fig. 3; see col. 5, line 66 through col. 6, line 4). Nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side configuration (see Fig. 3; see

col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5% of the surface area. Moreover, if both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

With respect to Claims 30 and 31, Gillespie teaches that at least about 5 percent of the surface area of each filament is and all filaments are made of a nylon polymer (see Fig. 3; see col. 5, line 66 through col. 6, line 4).

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gillespie (U.S. Patent No. 5,783,503) in view of either Warburton (US Patent No. 4,081,383) or George (US Patent No. 4,167,464) as applied to claims 1-5, 10-20, 24-26, and 28-32 above, and either as evidenced by or further in view of Tortora (*Understanding Textiles*, page 330).

With respect to Claim 34, Gillespie teaches forming spunbonded webs (see col. 7, lines 16-25) but does not clarify that spunbonded webs are bonded while molten. It is noted that Gillespie does teach that the polymers are molten at about 250 °C (see col. 8, lines 45-53), which is within the claimed property range of being able to be bonded between about 180 and about °C. However, spunbonding is necessarily done by bonding the filaments while they are still molten (see Tortora, *Understanding Textiles*, page 330, first paragraph). However, if Gillespie's teaching of spunbonding is not held to constitute a teaching of bonding at a temperature of between about 180 and about 250 °C, then it would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Tortora's teaching of spunbonding by bonding molten filaments together in Gillespie's spunbonding process in order to further bond the fabric. As combined, the spunbonding would occur at the claimed temperature because Gillespie does teach that the polymers are molten at about 250 °C (see col. 8, lines 45-53), which is within the claimed property range of being able to be bonded between about 180 and about 250 °C.

Response to Arguments

Applicant's arguments filed 04 August 2008 and 24 April 2008 have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 USC 102(b) rejections. Applicant's arguments appear to be on the grounds that:

1) The newly claimed limitation of the antistatic agent being in addition to the polymer is not met by Gillespie.

Applicant argues with respect to the 35 USC 103(a) rejections. Applicant's arguments appear to be on the grounds that:

2) Tortora's carbon would not be added to Gillespie's blend since Blackmon did not add carbon black to the polymer blend.

3) Tortora's carbon would not be added to Gillespie's blend since Bulgin teaches using antistatic fabric with 25% carbon black should be used.

4) Warburton's curing temperature is less than 160 °C, and Georges drying temperature is at about 50 °C. Both are outside the temperature range of spunbonding.

5) Applicant's arguments of identical orientation, physical properties of filaments, color pollution, and processing the polymers up to 300 °C pertain to reasons it would not have been obvious to one of ordinary skill in the art at the time the invention was made to combine the applied references.

6) The issue of whether the problem could have been solved is moot since the issue is whether the problem's solution was obvious.

The Applicant's arguments are addressed as follows:

1) Gillespie's nylon's or polyester's additional presence acts as antistatic agents to the polyester or olefins in the blends.

2 and 3) Blending carbon is feasible principally because Tortora's teaching does provide for forming bi-component fibers (see page 401, forth paragraph, through page 402, line 2).

2 and 3) In response to the indication that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., carpet yarn formation and 25% carbon black) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

2 and 3) Moreover, it is noted that Tortora's teaching of bicomponent fibers containing metal, which is an antistatic agent (see page 401, forth paragraph, through page 402, line 2) is not disputed.

4) The claim limitation of "wherein the filaments can be bonded" is noted as not positively reciting a step of thermal bonding. Thus, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., processing the polymers above 50 and 160 °C) are not recited in each of the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

4) Moreover, Gillespie teaches that a blend of the polymers' melt temperatures is used (see col. 8, lines 45-53), which would obviate processing at temperatures of 50 and 160 °C.

5) The limitations of identical orientation, physical properties of filaments, color pollution, and processing the polymers up to 300 °C not being met by Gillespie would not destroy the function of Gillespie principally because these are not limitations of Gillespie.

6) The issue of whether the problem could have been solved is at issue principally in response to Applicant's arguments regarding long felt need in Applicant's Arguments filed 12 October 2007. As recited in the Office Action dated 28 December 2007:

> In addition, there is no evidence that if persons skilled in the art who were presumably working on the problem knew of the teachings of the above cited references, they would still be unable to solve the problem. See MPEP § 716.04.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-8517. The examiner can normally be reached on Mon.-Thu. 7:30 a.m.-5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. B./
Examiner, Art Unit 1791

/Christina Johnson/
Supervisory Patent Examiner, Art Unit 1791